Fixed Length Data Search Device, Method for Searching Fixed Length Data, Computer Program, and Computer Readable Recording Medium

Abstract

The inventive device comprises a hash operation means 11 for operating and outputting a hash value of inputted fixed length data, a data table memory 14 consisting of N numbers of memory banks, where N is an integer that is more than and equal to 2, the data table memory 14 for storing a data table holding a large number of fixed length data, a pointer table memory 13 for storing a memory pointer table holding a memory address at which each fixed length datum is stored with said hash value as an index, and a comparison means 15 for simultaneously comparing a plurality of fixed length data stored at the same memory address in said N numbers of memory banks with a single fixed length datum inputted to said hash operation means, the comparison means 15 for outputting results of the comparison.